

IDENTITY (As used on Label and List)

CHEM-CREST 2000-X

Uses: Ultrasonic liquid detergent concentrate used for the removal of oils, greases, carbon residues, various oxides, particulate matter, and various other contaminants from steels, ceramics, glasses, and other compatible materials. Contact a Crest Ultrasonics chemical specialist for process specific recommendations

Section I – Product and Company Identification

Supplier & Manufacturer:
CREST ULTRASONICS CORPORATION
18 Graphics Drive
Ewing, NJ 08628, UNITED STATES OF AMERICA
www.crest-ultrasonics.com

Emergency Telephone Number
(800) 424-9300 (USA Chemtrec) or (703) 527-3887 (Int'l Chemtrec)
Telephone Number for Information
(609) 883-4000

Last update: 17 January 2017

Section II – Hazards Identification**Appearance** – Colorless detergent liquid, surfactant odor**GHS Classification:**

Acute toxicity, Oral (Category 5)
Skin irritation (Category 2)
Eye irritation (Category 2A)

**Pictogram:**

HMS Classification: Health: 1 Fire: 0 Physical: 0
NFPA Rating: Health: 1 Fire: 0 Reactivity: 0

Signal Word: Warning**Hazard Statements:**

H303: May be harmful if swallowed.
H315: Causes skin irritation
H319: Causes serious eye irritation

Precautionary statements:

P280: Wear protective gloves / protective clothing / eye protection / face protection P305 + P351 + P338: If eyes are exposed: Rinse continuously with water for 15 minutes minimum, ensuring to remove contact lenses if present and easy to do.

Recommended Personal Protective Equipment:

PVC-lined, neoprene, nitrile rubber, or polyethylene gloves, chemical splash goggles, and use good handling practices. Wear face guard and chemical apron when appropriate, as well as long pants and boots. Avoid splashing and spilling. Eye wash should be available in area. Wash hands before handling food after using any chemical.

Section III – Composition / Information on Ingredients

COMPONENTS:	% ACTIVE	OSHA PEL	EC #	C.A.S. #
2-METHYL-2,4-PENTANEDIOL	30-50%	125 mg/m3 (inhalation)	203-489-0	107-41-5
PROPRIETARY NON-IONIC SURFACTANTS	7-10%	N/E	TRADE SECRET	
PROPRIETARY INGREDIENTS, INERT	balance	NONE	TRADE SECRET	

Section IV – First Aid MeasuresGeneral Advice:

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Contact with eyes:

Flush with water for at least 15 minutes, lifting upper and lower lids occasionally. See a physician immediately.

Section IV – First-Aid Measure (con't)

If swallowed:

DO NOT INDUCE VOMITING. Give large amounts of water to dilute. See physician immediately. Never give anything by mouth to an unconscious person.

If inhaled:

Move person to fresh air. Give oxygen if necessary. If not breathing, give artificial respiration. Consult a physician immediately.

Skin contact:

Wash off with plenty of soap and water. Consult a physician.

Section V – Fire-fighting Measures

Suitable extinguishing media:

Water spray, alcohol-resistant foam, dry chemical, carbon dioxide

Protective equipment for fire-fighters:

Use self-contained breathing apparatus (SCBA) when necessary

Unusual Fire and Explosion Hazards

None

Section VI – Accidental Release Measures

In case of a leak or spill:

Completely isolate the area of the leak or spill. Remove all non-necessary personnel from the area. Dyke the spilled material with sand, earth, or absorbent material. Soak up or suction material to drums, following all recommendations in Section VIII – Personal Protective Equipment of this SDS. If possible, avoid draining to sewage and waterways. Material is very slippery.

Flush affected area after soak up with plenty of water.

Section VII – Handling and Storage

Handling of material:

Avoid contact with eyes, skin, clothing, and other exposed areas of the body. Avoid inhalation of vapor or mist. Use standard measures for fire-fighting purposes. Eye wash should be available in area where product is used. Ensure use of proper personal protective equipment when handling any chemical.

Storage of material:

Keep material in container, tightly closed, in a dry environment. Do not allow to freeze. Follow all appropriate grounding and bonding procedures during use of any chemical. Follow all appropriate lockout / tagout procedures in all areas. Do not allow access of unauthorized personnel to chemical storage areas. Observe all local, state, and federal regulations. Material may be repackaged in steel, aluminum, or poly containers.

Section VIII – Exposure controls / Personal Protective Equipment

Engineering Controls:

In areas where deemed necessary, investigate all engineering controls and techniques in order to reduce risk of exposure to any chemical. Provide necessary ventilation. If necessary, use local exhaust ventilation at sources of air contamination. Consult ACGIH ventilation manual or NFPA Standard 91 for exhaust system designs.

Face and Eye Protection:

The use of chemical splash / safety goggles is highly recommended, along with accessibility to eye wash stations. If necessary, provide workers with chemical full-face shields. Any long hair should be firmly held behind or on top of the head to avoid exposure.

Skin Protection:

The use of chemically-resistant clothing and PVC-lined, latex, or Nitrile gloves is highly recommended for use with this product. Consult with glove manufacturers for a list of gloves acceptable for use with any chemical. If necessary, wear full-face shield and rubber aprons with use of chemicals. Wash all clothing that has been exposed to chemicals before reuse.

Respiratory Protection:

Avoid inhalation of vapor from product. When exposure limits in a given area exceed set values, use NIOSH approved respiratory protection. Consult with respiratory protection equipment manufacturer for types of equipment suitable for each chemical. Respiratory protection must comply with 29 CFR 1910.134. When emergency conditions are presented, evacuate areas affected and use appropriate safety measures for respiratory protection such as, but not limited to, self-contained breathing apparatus, air-line respirator, full-face respirator, or other approved methods for each given chemical.

Section IX – Physical and Chemical Properties

Appearance / Odor	colorless, surfactant odor
pH (100%)	6.5 ± 0.5
Specific Gravity	1.0 ± 0.05
Vapor Pressure	N/A
Vapor Density	N/A
Melting Point	N/E
Freezing Point	<32°F/0°C
Boiling Point:	>212°F / 100°C
Solubility in Water	complete
Flash Point	N/A
Expansion Rate (butyl acetate = 1)	N/A

Section X – Stability and Reactivity

Stability	Unstable		
	Stable	X	This chemical is stable under anticipated normal operating conditions

Incompatibility (Materials to Avoid): None known

Hazardous Decomposition or Byproducts: Carbon monoxide and carbon dioxide can be liberated at extremely high temperatures

Hazardous Polymerization	May Occur		
	Will Not Occur	X	This chemical will not undergo hazardous polymerization under anticipated normal operating conditions

Section XI – Toxicological Information

Acute Toxicity:

2-methyl-2,4-pentanediol

Acute studies have shown that this material is known to be slightly toxic if swallowed (rat, rabbit, mice, guinea pig LD50 3,000-7,000 mg/kg), practically non-toxic when absorbed through skin (rabbit LD50 12,300-13,200 mg/kg), moderately irritating to skin and severely irritating to the eyes. Rats exposed to 160 ppm over an 8 hour period showed no deaths. Minimal to no skin irritation was noted in human exposure trials. When working with cutting oils, some individuals showed allergic skin responses. There were no adverse effects in short term inhalation exposures to rats nor rabbits. No genetic mutations were noted in bacterial or mammalian cells. Exposure in the diet showed no growth, behavioral, or fertility changes in rats. Kidney changes were noted, and developmental toxicity was observed at toxic level doses with maternal toxicity in rats and rabbits.

Carcinogenicity:

No component of this product at levels of greater than 0.1% is identified as a human carcinogen by IARC, ACGIH, NTP, or OSHA.

Teratogenicity:

No data available

Specific Target Organ Toxicity – single or repeated exposure (GHS)

No data available

Section XII – Ecological Information

A thorough analysis of the exotoxicity and environmental fate of this product have not been fully tested. Below is a summary of components of this material.

2-methyl-2,4-pentanediol

This material is practically non-toxic to a variety of aquatic organisms. The general range of LC50 of freshwater fish is above 1,000 mg/L, and typically in the range of 8,000-10,000 mg/L. Invertebrate aquatic species had EC50 values greater than 2,800 mg/L. This material is considered to be biodegradable (35-76% after one month).

Section XII – Ecological Information (con't)

Proprietary surfactant (non-ionic) – Generalized statement made on family of molecules

This material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50) in the range of 1-10 mg/L in some species. This material cannot be readily called biodegradable, but this does not mean with certainty that this material is not biodegradable under specific environmental conditions.

Section XIII – Waste Disposal

Always dispose of all chemicals via State, Local, and Federal Regulations. *Any processing done with the use of this chemical in which any substances are added to this material may make this waste management information inaccurate. Local laws must always be consulted when considering waste disposal.*

Section XIV – Transportation Information

US Department of Transportation (DOT), ICAO/IATA, IMDG

Non-hazardous, not regulated

Harmonization / Tariff Code:

3402905030

Section XV – Regulatory Information

OSHA Hazard Communication Standard

This product contains "Hazardous Chemicals" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (acute) Health Hazard – Yes

Delayed (chronic) Health Hazard – Yes

Fire Hazard – No

Reactive Hazard – No

SARA Title III, section 313

Non-listed chemicals contained in this product are not subject to regulation under SARA Title III, section 313.

TSCA Section 8(b)

All of the components of this product are listed on the TSCA Inventory

CERCLA Reportable Quantities

N/E

New Jersey, Pennsylvania, and Massachusetts Right to Know Act Listed Components

2-Methyl-2,4-pentanediol, CAS# 107-41-5

Water, CAS# 7732-18-5

Section XVI: Other Information

Chem Crest Chemical SDS are available on via website, <http://www.crest-ultrasonics.com>

SDS Prepared by: Sean Joyce, Applications Lab Manager

Date of preparation: 17 January 2017

Legend:

N/A – Not Applicable

N/E – Not Established

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